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## INTERNATIONAL SEARCH REPORT

International Application No  
PCT/GB 03/04032A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 H04R9/02

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 H04R H02K B06B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 237 639 A (YASKAWA DENKI SEISAKUSHO KK) 23 September 1987 (1987-09-23)	1-4, 15-17, 20-23, 25,27-31
A	column 1, lines 4-11 column 1, line 42 - column 2, line 37	5-14,18, 19,24,26
A	column 3, line 11 - column 4, line 50 ----- PATENT ABSTRACTS OF JAPAN vol. 0051, no. 03 (E-064), 3 July 1981 (1981-07-03) & JP 56 046398 A (FOSTER DENKI KK), 27 April 1981 (1981-04-27) abstract; figures 2,5,6 ----- -/-	1-31

 Further documents are listed in the continuation of box C. Patent family members are listed in annex.

## \* Special categories of cited documents :

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
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- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
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- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*&\* document member of the same patent family

Date of the actual completion of the International search

20 April 2004

Date of mailing of the International search report

01/06/2004

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 91/05447 A (JBL INC) 18 April 1991 (1991-04-18) cited in the application page 1, lines 12-19 page 5, lines 8-24 page 7, line 5 - page 9, line 26 _____	1-31

**INTERNATIONAL SEARCH REPORT**

Information on patent family members

International Application No

PCT/GB 03/04032

Patent document cited in search report		Publication date		Patent family member(s)		Publication date
EP 0237639	A	23-09-1987	JP	62193553 A		25-08-1987
			DE	3682671 D1		09-01-1992
			EP	0237639 A1		23-09-1987
			US	4703297 A		27-10-1987
JP 56046398	A	27-04-1981	JP	1223828 C		15-08-1984
			JP	59002239 B		17-01-1984
WO 9105447	A	18-04-1991	WO	9105447 A1		18-04-1991